

IT'S EASY TO MAKE GOOD CLUTCH STOP

Type Will Vary With Design of
Car—Clashing Noise Can Be
Avoided.

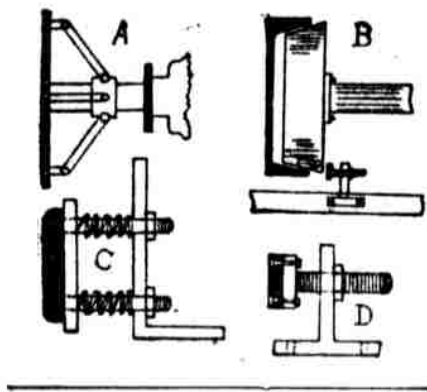
By C. P. SHATTUCK, M. E.

Motorists experiencing trouble when changing speeds will find that the fitting of a clutch stop or brake will remedy the fault and make the changing of gears under all conditions a simple matter, especially with some types of motors the clutch shafts of which spin that it is difficult to change speeds without a clashing noise.

A clutch stop can be made by the owner and fitted, and several methods are shown in the accompanying illustration. The type of clutch, cross frame members, etc., will vary with the design of the car, but a little study will enable one to determine how best to proceed with the work.

The stop shown at C is adaptable to a cross clutch. It is mounted on the gear support, and its construction is shown in detail at D. It consists of a T-piece of iron, which is drilled and tapped to take a threaded bolt to which is fitted a leather facing or pad. The leather should be countersunk so that the heads of the screws will be well below the surface of the material. The bolt is held in place by a locking nut. This type is adjustable to wear and position.

Another design is shown at C. The support is drilled to allow the bolts



carrying the pad to move freely. By slipping a coil spring over each bolt and between the pad and the brace, a gradual engagement is obtained of the clutch and the stop.

The design is adjustable both for the tension of the spring and the position of the stop. That shown at A is for the plate type of clutch. On the gear-shaft housing is fitted a leather pad or ring. It is so built up that when the clutch is disengaged the hub will make contact with the pad.

In installing a clutch stop first ascertain how far back the clutch goes. This can be determined by disengaging the clutch and noting the distance. Mark the place and allow a little space between the point and the pad of the stop.

If the stop be made adjustable as suggested, it will be a simple matter to set it so that the desired results will be obtained. The stop should so operate that the spinning will be slowed down, not wholly stopped. A little practice after fitting the stop will allow the operator to "feel" the stop when the clutch makes contact.

**Artemas Ward, Jr., Heads
King Motor Car Company**

DETROIT, July 10.—Artemas Ward, Jr., vice president and advertising manager, has been elected president of the King Motor Car Company, while Secretary and Treasurer, F. A. Vollbrecht, has been elected vice president and general manager. He also continues as treasurer.

This announcement was made at a dinner here, when J. G. Bayerline officially stated that he had resigned the presidency of the company to give his undivided attention to other duties. It was with regret that the resignation was accepted. Mr. Bayerline is not in a position as yet to announce his new plans.

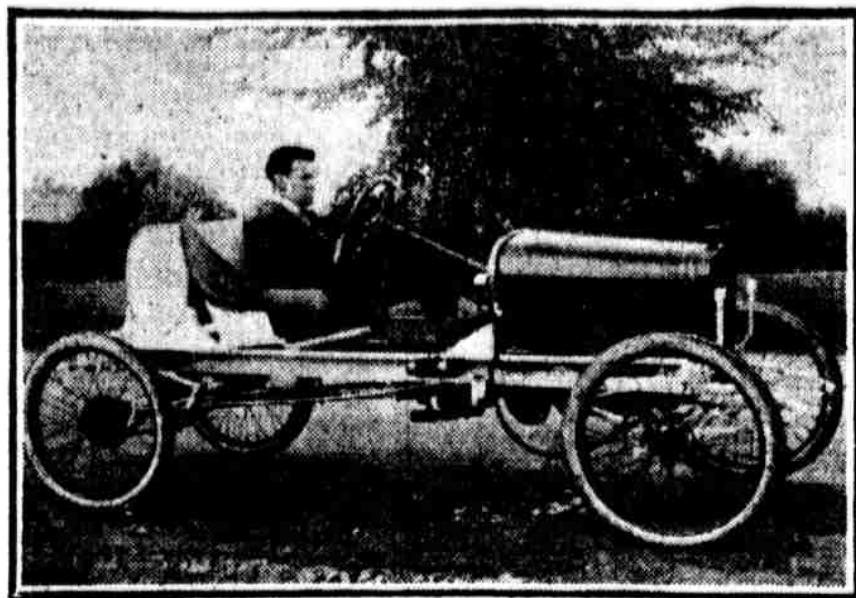
It was also announced at the dinner that Factory Production Manager J. B. Seigfried would continue in charge of the factory as assistant general manager. The sales branch continues in charge of Sales Manager W. L. Daly, with H. C. Brafield assuming the position of sales promotion and advertising manager at the factory. J. R. Emerton is purchasing agent under Mr. Seigfried.



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Exclusively in Record Time.
10 Gal. Gas. and \$1.20
1 Gal. Oil

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Models
HAYNES
Are Here**
Burger Motor Co.
1119 14th St.—North 1292

MAKES EXCELLENT RECORD IN RACE AT YORK



ARGO SPEEDSTER, Driven by WALTER F. SMITH.

Caring for One's Own Car

By "GEARS."

"Gears" is a mechanical engineer who drives and cares for his own car. He will discuss your problems in this column weekly. Inclose self-addressed, stamped envelope for answer to questions not of general interest.

Dry Cells More Expensive.

During the last few weeks automobilists utilizing dry cells for ignition or lighting, have noted that the price has advanced. The standard type of dry cell formerly retailed for 25 cents. It now sells for 30 cents and in some cities the price is 35 cents.

This increase in cost is due to the war abroad as certain material utilized in the cell is imported. And it is not unlikely that a still further advance will be made in the price of batteries. For this reason the motorist should be as economical as possible of the battery. When employed for supplying current for ignition, the vibrator should be adjusted as lightly as possible so that the minimum amount of current will be drawn. If dry cells be utilized for lighting, using as small candlepower lamps as possible will effect a saving in current. Unfortunately, dry cells cannot be utilized as other automobile material for they depreciate in time even when not used. Care should be taken in installing the cells to avoid the possibility of a short circuit. The high cost of dry cells will loom the storage battery industry as storage batteries may be recharged at a nominal cost.

Removing Stubborn Wheels.

The rear wheels of some cars cannot be easily displaced without the aid of a wheel puller. The tool is simple and easily operated, provided a few precautions are observed. Displace the wheel or hub cap, and if the puller be provided with arms or jaws, these are slipped between the spokes and clamped to the brake drum. Care must be taken that the jaws do not grip or come in contact with the flange of the axle housing. Set the point of the screw member of the puller in the center of the axle, and set up the screw. By tapping the head of the screw with a hammer, the wheel may be started, after which it is an easy matter to displace it. If the wheel puller be of the hub cap type, the set screw should be set up snugly before tapping it with the hammer.

Dragging Brakes.

Owners of brand new cars should examine the brake drums after operating the car a short distance to note if the brake drag. If the drum be unduly warm it indicates a dragging lining which not only wears the material but takes a certain amount of power to overcome the resistance.

Value of Hand Vise.

A small hand vise, one that can be clamped to the running board of the car, is a valuable addition to the tool kit. It can be employed for a number of useful purposes on the road, and does not take any room to speak of in the tool kit. The vise can be utilized for clamping a patch to a tube while the cement is drying, for holding small

material to be filed, and for many other purposes. Hand vises are not expensive. A certain type marketed is very useful for adjusting in replacing a bent or twisted locking ring of the quick demountable type of rim. It has jaws four inches wide with an opening of one and one-fourth inches, sufficient to meet ordinary road requirements. In selecting a hand vise one having hardened jaws is preferable to ordinary material.

Simple Valve Lifter.

If caught upon the road with a broken valve, and it is necessary to displace it, and no lifter is handy, take a good sized file and a block of wood. By using the file as the fulcrum and the file as the lever, the valve spring may be easily compressed. The writer employs this method when removing valves and finds that it is adaptable to practically every type and size of motor employing poppet valves. The tang of the file is placed between the coils close to the collar. A little practice will demonstrate the practicability of the method.

Studebaker Denies He Is Going Into Racing

Authoritative denial has been given rumors that Studebaker contemplates entering the automobile racing game. Reports of this nature have frequently found their way into print of late, this being the second repudiation of any such intention coming within the past few days from manufacturers of an importance in the industry that might warrant their becoming interested in the sport.

A possible basis for the rumor connecting the Studebaker factories with a desire to achieve speedway fame may be found in the negotiations which were opened several weeks ago for specially constructed motors of the same type that are being used on the new Studebaker Six. In some manner it had become known about that new methods had been discovered for developing increased power besides that of enlarging the bore. Report soon had it that the Studebaker engineers had discovered the secret so jealously guarded by the French experts, and which has repeatedly brought to their confessions racing track honors.

The negotiations did not proceed far, however, the Studebaker officials making it plain that they were interested only in developing a more powerful motor for their 1916 cars, and, therefore, could not devote time to experimenting along other lines.

Envoys Buy Studebaker.

The minister from the Netherlands, R. D. Van Rampart, and the representative of Greece, P. R. Constatas, at Washington, have purchased Studebaker cars for official and pleasure use. The number of Studebakers owned in officialdom at the National Capital is being considered a compliment paid American methods of manufacture.

UNION GARAGE DEVICE IS UP TO THE MINUTE

Machinery Installed to Place
Solid Tires on Carriages in
Twenty Minutes.

With the installation of machinery for placing solid tires on carriages in less than twenty minutes, the tire department of the Union Garage has become the best equipped in Washington.

This tire department is the pride of the garage, when he conducts some prominent automobile man from foreign parts through his seven floor monument to efficiency.

Recently, when Hugh Chalmers was a visitor, Mr. Hoover described the features of this department in no uncertain language.

"We have here," said Mr. Hoover, "what you will grant is the superior of anything you ever saw, no matter how big the city. It's the best tire department in these parts. Over there is a side wall vulcanizer, the first to be used in Washington. Here is a solid carriage tire department. There is the most complete stock of pneumatic tires in the city. Back yonder is a five-ton hydraulic solid truck tire press that will give every executive in this city many a minute of thankfulness when we fix him up in half the time he had been used to giving when he needs new tires."

"We have left nothing undone that will gain our end of dispatch and superior workmanship."

Mr. Hoover is now planning to move the large accessory department further back on the main floor so as to fit up a beautiful display room for a leading line of cars for which the garage has taken the Washington agency.

PUNCTURE CURE IS ON CAPITAL MARKET

Preparation Is Designed to Be
Placed Inside Tubes of New
Casings.

At last a puncture cure is on the Washington market that is approved by automobile owners who have tested it for several months or longer. This puncture cure is known as the "Korker Cure," and is a preparation which is placed inside the tubes in new casings. Several well-known tire companies have written the manufacturers that the use of "Korker Cure" does not affect their guarantee.

C. O. Fountain, with offices at the Vermont Garage, formerly a business man of New York city, has charge of the distribution of this preparation. Mr. Fountain has installed it on more than three hundred cars in Washington, some of them run by the largest commercial houses, and has found it to give the greatest satisfaction according to those who have used it.

As a general rule, the public is greatly prejudiced against all preparations intended to prevent puncture troubles because of the number of inventions that have been highly guaranteed in the past, and that have not proved up in service. This prejudice, however, should not be allowed to stand in the way of a preparation that will actually accomplish its end.

Why Packard Men Chose Goodyear Tires This Year

The selection of Goodyear cord tires as standard equipment of the Packard "Twin Six" for 1916, was the result of a series of unusual grueling tests by experts of the Packard Motor Car Company.

Time and again, according to Packard men, they tried to out Goodyear cords "out of business" in final manner of trials, before passing final approval. Goodyears won the Packard place strictly on merit and performance.

LITTLE CAR MEETS AN UNUSUAL TEST

Argo, Driven by W. L. Smith,
Sets Record for Endurance
and Dependability.

An unusual demonstration of dependability, low gas and oil consumption, has just been made by the diminutive Argo speedster. Together with a number of other cars also entered in the York Motor Club's meet July 4 the Argo, with W. L. Smith, manager of the Smith Motor Sales Company, and H. J. Featherston, left here last Saturday afternoon for York. After the ninety-mile run, at speed averaging thirty to forty miles an hour, it took part in the parade at York, and Sunday morning a sixty-mile trip was made to Lancaster and return.

On Monday Mr. Smith brought the car out on the track to compete in the light car event, but owing to the fact that other entrants did not appear, this event was declared off. Mr. Smith was determined, however, that the Argo should show its caliber, and he therefore entered it in the five-mile scratch event for cars up to 200 cubic inches piston displacement, pitting it against the Mercer, Semmes Special, Cole, and Buick. The Argo won in 7:06, and the fact that the tiny Argo was fourth in 7:58 is conclusive proof that it possesses much of the speed and ruggedness of larger and more expensive cars.

Its lightness is a great asset, in point of low fuel and tire expense. On the entire run, over more than 250 miles, only seven and a half gallons of gasoline and two and a half quarts of oil were consumed. The car was a stock car absolutely, the only change made being the addition of bucket seats and the removal of muffler and mud-guards. Nothing was done to enhance its natural efficiency either by changing the gears or the use of high test gasoline. Just before the race, Mr. Smith replaced old tires with new ones. The same tires are on the car now, and in spite of difficult turns on the half-mile track at 45 miles an hour, the Argo's tires show no evidence of the grueling pace of the race and are not chewed or torn in the slightest degree.

Altogether, the Argo proved conclusively a small car that is highly efficient under all conditions—a little brother to the big car that will prove a boon in low maintenance cost to the man of modern circumstances.

The field of participants in the Argo five-mile scratch race for automobiles up to 200 cubic inches piston displacement—won by Mercer (Moore), time, 7:44.15.

Five-mile free-for-all race—won by Eye-See-Bee (Barber), time, 8:24.

Five-mile Australian pursuit race—won by Mercer (Moore), time 6:24.

New Packard Model Is a Hit in Capital

Within three weeks after the Packard Motor Car Company was in a position to accept orders for the new Twin Six model, customers' specifications for more than \$5,000,000 worth of cars had been received at the factory. These orders did not include the many options held by hundreds of persons in the various cities who were waiting their opportunity to see and ride in the demonstrators of the local dealers. Practical is all those placing orders did so without having ridden in the new car.

Upon the arrival of the first demonstrator in Washington, Manager S. A. Luttrell wired "More than two thousand people have seen the car and inspected the car the three days it appeared in Washington. It represents engineering achievement which will mark the beginning of a new era in the sale of high grade motor carriages. The interest displayed by the general public is unprecedented. Based on orders already received our allotment will not be half enough cars."

Despite the fact that the Packard Company will make three times as many cars as last year the production promises to be far short of demand.

H. B. Leary Recovering.

H. B. Leary, the agent for the Maxwell, who has been seriously ill with pleurisy, but is believed to be out of danger.


New Maxwell Car Wins Three Races

H. B. Leary, Jr., has received word from C. M. Strieby, the Maxwell special representative, who conducted the 1,000-mile "Utility Run" in Washington last April, that the Maxwell factory has proved its special chassis which has been driven by Rickenbacher, to be the fastest car built in America.

On July 5, at Omaha, this car won the 300-mile race with an average of 91.07 miles per hour. The same car won the Sioux City 300-mile race on July 3, and ran third in the Chicago Derby on June 28 with an average of 96.83 miles per hour. Rickenbacher drove all three races.

Barnhart Warns Against Route Through Occoquan

William P. Barnhart, the Washington distributor for Pullman and King cars, and who is establishing agencies in Virginia territory, has wired friends on the local newspapers valuable information concerning the roads from Washington to Fredericksburg. The wire is as follows: "Do not send motorists Occoquan route. Roads absolutely vile now. Utterly impassable through swamp sand. Practically no even in dry weather. Not one road sign entire route. Impossible to pick proper road. Advise Mannassas route." WILLIAM P. BARNHART.



WE have just received a shipment of EIGHT-CYLINDER CADILLACS

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The Cook & Stoddard Co.

1138-1140 Conn. Ave. Tel. North 7810

Miller Bros. Special Money Savers

Spark Plugs, Miller Bros. "Sure Fire," were 40c,
Sale price25

Millerine Oil, 5 gallons (wood incased) container
free \$1.50

Tool Boxes, 22-inch, for Ford cars, Bargain price \$1.50

Stop Associating With Cranks—Start Right THE "GEHRMOTOR"

Starts your car every time. Lights your lights
and saves your clothes and temper. Simply push a
button and the engine starts. A child can operate it.


\$75—PRICE ONLY—\$75

Installing extra, \$5.00—Lights extra, \$5.00

DISTRIBUTORS

Miller Bros. Automobile & Supply House

61 Pierce St. N. W. 1105 14th St. N. W.
Washington, D. C.



"TWIN-SIX"

More interest is manifested in this 1916 model than in any other car for all time.

More than 2,000 inspected the advance demonstrator at our salesrooms July 1, 2, and 3. We actually demonstrated the car to more than 400.

The Packard Twin-Six for 1916 is the standard by which the value of all cars will be determined.

"1-35" Twin-Six, \$2,950 F. O. B.
"1-25" Twin-Six, \$2,600 F. O. B.

The Luttrell Co.

1214-16 New Hampshire Ave.
Phone West 985



UNION GARAGE

This is one of a series of advertisements written to tell the public all we know about the biggest garage in the United States.

No. 2.

Tire and Accessories Departments

Tires of all kinds and sizes, including solid tires for trucks and carriages, are carried in stock and can be put on in a jiffy by the skilled employes in the Tire Department.

This is the only garage in Washington which has a 150-ton hydraulic tire press and the improved slide wall vulcanizing plant. These two modern devices alone are sufficient to place the UNION GARAGE on a higher plane of efficiency in handling both solid and pneumatic tires than any other establishment in the South.

Patrons of the UNION GARAGE can step into the largest and finest accessories store in Washington without going out of the building.

The Accessories Department is a complete store fully stocked with everything used in motordom, from the tiny cigar lighter to the largest electric outfit.

S-E-R-V-I-C-E in its biggest and broadest sense is the hall mark of this big institution.

UNION GARAGE

G St. Between 6th and 7th
C. Walter Hoover, Mgr. Phone Main 8596